

USE MACHINERY FOR CUTTING CORN CROP

Binders and Platform Harvesters Save Man-Power and Energy.

Performing Task by Hand Is Hard, Disagreeable Job—Bundle Elevator Attachment Eliminates One Man in the Crew.

(Prepared by the United States Department of Agriculture.)

This year when farm help is so limited, there is an urgent need for labor-saving machinery wherever possible. One man with a corn knife by working hard can cut and shock an average of 1½ acres a day. Two men with a platform harvester can harvest 4 or 5 acres in the same time and three men with a corn binder in a ten-hour day can cut and shock from 7 to 9 acres. Cutting corn by hand is a hard, disagreeable task, the bulletin points out, and the time when it should be done is limited to a few days if the full feeding value of the corn is to be obtained. Fall plowing, seeding for winter wheat and digging potatoes must be done on many farms at about the same time. In such cases, the timeliness and ease of accomplishing the work are determining factors in deciding the advisability of using corn-cutting machinery.

The corn binder does the best work when the corn is still standing upright.



Labor-Saving Methods of Harvesting Corn.

Usually most satisfactory results are obtained with a three-horse team, and sometimes four horses are necessary when the corn is heavy or the ground hilly. In ordinary yields, one man operating the binder will keep two men busy gathering the bundles and shocking them. These three men cutting and shocking by hand would scarcely cover more than four acres in a day and it would be necessary to work much harder than when the corn binder is used, thus the machine requiring less laborious work takes from one-half to two-thirds as long to cut a given acreage.

When the binder is used for cutting corn for silage the labor of at least two men will be saved as compared to cutting by hand. One binder will usually be able to cut the corn as fast as a 12 or 14-inch silage cutter can handle it. A great deal of time is saved in unloading at the cutter, because the corn is in bundles, which enables a further reduction in the size of the harvesting crew.

A bundle elevator attachment to the corn binder saves further labor. By this attachment the bundles of corn are delivered directly to a wagon driven by the side of the binder. This method eliminates another man in the crew. When the bundles are dropped from the binder to the ground two men are generally required to hand them up as fast as one man can arrange them on the wagon. When an elevator attachment is used one man usually arranges the bundles on the wagon as they are delivered from the binder and another man or boy drives the team.

The platform harvester is the most satisfactory machine when the acreage in corn is not sufficiently large to justify a binder. This machine consists of an A-shaped platform on low wheels two sides of which are equipped with knives. It is drawn by one horse, operated by two men, and cuts two rows at a time. The men gather the stalks as they are cut, and when the shock is reached the horse is stopped and the men carry the cut corn to the shock. In cutting corn with a platform harvester for silage much time can be saved and efficient work done if a wagon is driven alongside the harvester and the corn placed on it directly as it is cut. By this method approximately five acres of corn yielding 8 tons of silage per acre constitutes a fair day's work. Two men with a platform harvester and one horse will cut and shock at least as much corn in a day as three men cutting by hand. This machine thus taking the place of one hired helper will very nearly pay for itself in cutting 40 acres.

Avoid Damp Grass.

Don't allow the hens to run the chicks through the damp grass on dewy mornings or rainy days.

PRACTICAL WORK OF DISINFECTION

Thoroughness in Performing Operation Is Important for Securing Best Results.

PRELIMINARY WORK NEEDED

Various Surfaces Should Be Swept Clean and All Refuse Matter Removed—Selection and Preparation of Disinfectant.

(From the United States Department of Agriculture.)

In the practical work of disinfection there are three essentials:

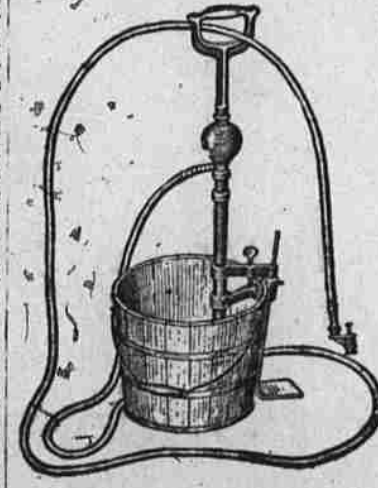
1. A preparation of the building that will facilitate reaching organisms of disease.
2. A disinfectant which upon contact can be depended upon to destroy such organisms.
3. A method of applying the disinfectant that will assure the most thorough contact with the bacteria.

Before beginning the use of disinfectant it is essential that certain preliminary work be done in and about the stable that is to be treated. The various surfaces, such as ceilings, walls, partitions, floors, etc., should be swept until free from cobwebs and dust. Any accumulation of filth should be removed by scraping and scrubbing, using for this purpose a wire or other stiff brush and warm water with a liberal quantity of washing soda. In some cases the woodwork may have become softened and so porous as to be a good medium for the absorption of disease germs. Such woodwork should be removed, burned, and replaced with new material.

Remove Refuse Matter. All refuse, manure, etc., from stable and barnyard should be removed to a place inaccessible to live stock and, if possible, be burned or thoroughly mixed with a solution of chloride of lime in the proportion of six ounces to one gallon of water. If the floor is of earth, it will doubtless have become stained with urine and contaminated to a depth of several inches. In such cases four inches or more of the surface soil should be removed and treated as suggested above for refuse and manure.

Having made ready the field operation, the next consideration should be the selection and preparation of the disinfectant. The fact must not be overlooked that many agents used for the destruction of bacteria are likewise poisonous to animals and man. In fact, some drugs, although powerful as germicides, are so poisonous as to preclude their general use in the work of disinfection. Among such, as previously stated, is bichloride of mercury, which possesses the power of destroying not only bacteria, but spores as well. It is therefore essential in deciding upon an agent to select one having a known germicidal strength, properties of solubility and at the same time possessing a reasonable degree of safety to animals and man.

Method of Application. The efficiency and economy of the work will depend in a great measure upon the method of applying the disinfectant. Economy requires that the disinfecting solution be applied rapidly; efficiency requires that it be not only spread in such manner as to cover the entire surface requiring disinfection, but that sufficient quantity and force be used to drive the so-



Pail Spraying Pump Suitable for Disinfecting Small Stables.

lution into all cracks and crevices. Where a very limited surface is to be treated, as, for example, one stall, it may be possible to apply the disinfectant in a satisfactory manner by means of a whitewash brush. In all cases, however, the best method of applying the disinfectant and the lime wash is by means of a strong spray pump.

The entire interior of the stable should be saturated with the disinfectant. Special attention should be given to the feeding troughs and drains. After the disinfectant has dried, the surface may be sprayed with lime wash, provided this has not been combined with the disinfectant as previously described. When the work has been completed it will be advisable to open all doors and windows, of the building for the admission of air and light.

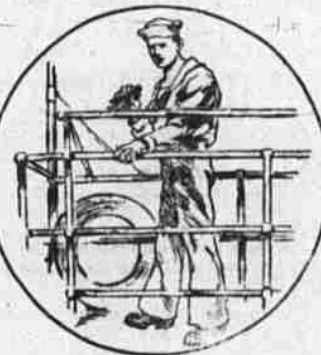
"Everything Goes In War, 'Says Jackie' Even a Fellow's Hair"



"O H, very well. We're the bald-headed twins if you say so." So say these two members of the U. S. Naval Band, Cleveland station, which is on tour in the Fourth Federal Reserve District to boost bond sales for the Fourth Loan. You can't get a "rise" out of either of these boys by reference to their unthatched domes. Witness the smiles.

"Everything goes in war," says the baldy with the big horn, "even a fellow's hair."

That one is Edmond Inski, who enlisted with his E flat tuba the minute the band was talked of. His "twin" is A. F. Gerloch, who was financial secretary of the musicians' union in Cleveland before enlisting. Inski is 21—Gerloch is 26.



OUR boys who have gone to the navy are constantly on the alert for the submarines which menace their army comrades on the long trips across the Atlantic.

One \$100 Liberty Bond and one \$50 Liberty Bond will equip an enlisted man in the navy for one year. Or the same two bonds will feed him for a year.

Cards From Boys Will Urge Buying of Bonds

Ten million sets of post cards—five in a set—have been sent to Europe by the War Loan Organization at Washington to be distributed among the boys of the American Expeditionary Forces.

By this time they probably have been put in the hands of the boys over there and some are probably on their way back to this country.

Each card bears a message from the boy to the home folks urging the home folks to invest in Liberty Bonds.

The cards bear photographs of tanks, guns, ammunition, etc.—things which the boys need and which the home folks' money will buy. The cards will be coming back soon in large numbers. Ohio and Kentucky and West Virginia and Pennsylvania will be receiving their share of them.

Brother, Buy Another!

Brother, buy another bond! It will help to pave the way For the boys who've gone beyond The Atlantic to the fray. Do not falter. Do not say You have done enough, my brother. Buy another bond today—And another—AND ANOTHER!

What a blessed chance is yours Thus to do your humble part For the Freedom that endures Deep in every Yankee's heart! Give this Loan a rousing start With your glad subscription, brother. Every dollar is a Dart! Buy a bond—AND BUY ANOTHER! —William F. Kirk.

WHERE LIBERTY BOND FUNDS GO

ONE FIVE HUNDRED DOLLAR BOND WILL BUY: Steel helmets for a company of infantry, or Five hundred overseas caps, or Pay the cost of drafting one hundred men.

"Let your dollars be the ships that will bring the boys home again—buy Liberty Bonds!"

Smother the Kaiser in Liberty Bonds.

No Resisting These Officers. Church—I hear you have policemen in New York, now? Gotham—Yes, we have. "Have you seen 'em?" "Oh, yes." "Think they'll be efficient in making arrests?" "I can't see how any man could resist them."



BLOOD or BREAD

Others are giving their blood. You will shorten the war—save life if you eat only what you need and waste nothing.

UNITED STATES FOOD ADMINISTRATION

ELIMINATE GUESS WORK

(Prepared by the United States Department of Agriculture.)

The cow-testing association takes the guess work out of dairying. No longer can the camouflaged appearance of a fine appearance protect the low-producing dairy cow. Conformation indicates performance, but the Babcock test and the milk scales always tell the true story. Knowing the true feed and production records of each cow, the dairyman practices selective breeding, eliminates with certainty all low producers, and feeds the remainder according to known production.

SKIM MILK IS BEST UTILIZED BY FAMILY

Feed Only Surplus of Nutritious Food to Live Stock.

None of It, Either Fresh or Sour, Should Be Wasted—Supplies More Food Value in Preparing Dishes for Table.

(Prepared by the United States Department of Agriculture.)

It is generally understood that milk is a good, nutritious food, yet on many farms some skim milk is fed to live stock that could be utilized to better advantage by the housewife in feeding the family. It is cheaper and easier to find an economical substitute for it in feeding stock than in feeding human beings. Skim milk should therefore be used in home cooking first, in every way possible, then if there is any surplus it should be given to the young stock on the farm. It is needless to say that none of it, either fresh or sour, should be wasted. When utilized in preparing dishes for human consumption it supplies more food value.

When then fed to animals and converted into meat. Surplus skim milk may be used economically to feed hogs, yet 100 pounds of it, which will produce 15 pounds of cheese, produce only 4.8 pounds of dressed pork if fed with corn. Skim milk if made into cottage cheese furnishes nearly seven times as much protein and nearly as much energy as the dressed pork it would produce. Of course the most nourishment is obtained when skim milk is used direct, either for drinking or cooking. As far as possible, therefore, skim milk should be used for human food, and only the excess fed to live stock.

Buttermilk is equal to skim milk for feeding hogs, while whey is half as valuable. Whey, being low in protein, is not well suited for young pigs and should be fed to older animals.

Ordinary grass pasture, or green rye, oats, sorghum, rape, clover, alfalfa, peas, or beans can take the place of skim milk after the little pigs get a start. Much green feed can be raised without greatly reducing the acreage of other crops.

Calves and pigs do well when some skim milk is fed, but they need it only for a short time and in limited quantities. Except when fed to very young animals, skim milk is fed most economically when supplemented with grain. For dairy calves skim milk may be substituted in part for whole milk on the tenth day. If the calves are vigorous they should receive a little grain and hay at two weeks of age and it is safe to discontinue the skim milk five or six weeks later.

By substituting grain, green feed, buttermilk and whey for skim milk in animal feeding, much skim milk may be released for use in cooking, for condensing, or for making cottage cheese.

Barley Easily Damaged.

Barley is easily damaged by the weather. Wet days at cutting time, poor shocking and over-ripeness will reduce seriously the quality.

FOX NECKPIECE ALWAYS SMART



Some fur pieces serve only for winter wear and others do duty winter and summer. A scarf or a small cape is a good choice for an all-the-year-round neckpiece. The scarf pictured looks like a single pelt of the fox, but is made of two skins. It is finished with head, claws and tail. Fox is a soft and very becoming fur. It is dyed in many colors, but the choicest skins are not dyed.

TENNIS

By R. ESTELLE EVERETT.

Geoffrey Hilton tossed a penny on the counter, caught up a newspaper and hurried into the waiting car. He opened his paper, and after finishing an article, was about to turn the page when he heard a smothered and disappointed "Oh!" beside him. He turned and discovered that he was sitting beside a very attractive girl dressed in sports clothes, carrying a tennis racket. Her golden hair curled about her face bewitchingly; she turned her head so quickly that Hilton received only the faintest glimpse of blue eyes. He opened the paper to where it was before and searched diligently for what had so interested the beautiful stranger. His search was of no avail, however, and soon the girl got off. Nearing his stop, and turning to press the button, Hilton noticed a postcard lying on the next seat addressed to the firm of which he was an employee. He picked it up, slipped it into his pocket and promptly forgot all about it.

At his club several hours later while he was smoking his after-dinner cigar Hilton's mind wandered to the girl on the car. Thoughts of her reminded him of the card which probably she dropped, and he fished it out of his pocket. Being careful not to read the message, he just glanced at the signature—Rosalie Earnshaw, 340 Somerset avenue.

"By Jove," he murmured, "Jack Warren lives at 343. I wonder if he knows her?"

The next day, accidentally on purpose, Geoffrey Hilton happened to stroll by Jack Warren's place of business just as the latter was leaving for lunch. The two old colleagues were glad to meet again, and joyfully talked over old times. After a little maneuvering Hilton obtained for himself an invitation to dinner at the Warrens that evening.

As it was still light after dinner, thanks to Uncle Sam's light-saving idea, the two men had a set of tennis. After Mrs. Warren came out they had another delightful hour on the veranda.

It was with great interest that Hilton watched the house across the street. Suddenly a light glowed in one of the upper windows, and his girl of the car appeared to pull down the curtain.

"Nice girl—Rosalie Earnshaw," remarked Warren. "Do you know her, Jeff?"

"I believe I've seen her once or twice," replied Hilton, "but I do not know her."

"Say, Beth," cried Jack, "I've a corking idea! Let's invite her and Jeff Wednesday evening for dinner and have a couple of set of doubles." "Why, it would be lovely," agreed his wife. "Could you come, Mr. Hilton?"

"With the greatest of pleasure," said Hilton, heartily.

Soon Hilton bade his friends good-night and departed, promising to be there Wednesday. That night he dreamed that he was at the Warrens' playing tennis with Rosalie. Somehow his racket twisted and he sent the ball he was serving directly into Rosalie's face! Stunned by the blow, Rosalie, fainting, dropped to the ground. Hilton rushed for water, and awoke to find himself kneeling on the floor liberally besprinkling the rug with water.

Wednesday was an ideal August day. Hilton strode gayly along Somerset avenue, swinging his racket, his heart keeping time to his quick footsteps.

As Mrs. Warren introduced him to Miss Earnshaw, he fancied that she grew a shade pinker, but he wasn't sure. She gave him her hand and a beautiful smile in such a way that Jack asked:

"Have you two met before?" Hilton looked at Miss Earnshaw interrogatively. She replied: "We've never spoken, but Mr. Hilton very kindly permitted me to read his paper one evening."

Geoffrey was dumfounded—that she should remember; he never even imagined—luckily the Japanese gong announcing dinner sounded, and the group went into the dining room.

Mrs. Warren, ardent matchmaker that she was, made Rosalie and Hilton partners in the tennis which followed. All four were excellent players and there was a hard tussle for the games. They played until it was so dark they had to stop, leaving the score a tie.

Very often in the fortnight which followed Hilton was to be found in the vicinity of Somerset avenue—either at Rosalie's or the Warrens'. They had many delightful tennis games and canoe trips on the near-by lake.

One afternoon in late September Geoffrey and Rosalie were idly drifting across the lake in a canoe, when Geoffrey asked Rosalie to share the rest of his life with him.

Wanted His Fault.

The young recruit was gifted with small feet and experienced difficulty in getting shoes to fit at the supply room. After several attempts the best he could do was many sizes too big. At drill that day the command was given to "mark time." All seemed to obey except him with the small feet. Singling him out, the commanding officer demanded to know why he was not "marking time." "Why, man alive," replied the poor fellow, "my feet are going, but my shoes ain't!"